

REMARKS

In response to the Final Office Action mailed October 14, 2005,
Applicants respectfully request reconsideration.

Information Disclosure Statement

As a preliminary matter, Applicant advises the Examiner that a Supplemental Information Disclosure Statement was filed April 8, 2005. The Supplemental Information Disclosure Statement was filed before a first Office Action following the filing of a Request for Continued Examination (RCE). Applicant did not receive an initialed copy of the 1449 form with the Office Action, and requests that the Examiner forward such copy with the next communication.

Allowable Subject Matter

In the Office Action, the Examiner indicated that claims 10, 18, 29, 36, 47, 55 and 68 would be allowable if rewritten in independent form.

Claim Rejection Under 35 U.S.C. § 103

In the Final Office Action, the Examiner maintained the rejection of claims 1-9, 11-17, 19-28, 30-35, 37-46, 48-54, 56, 59-67 under 35 U.S.C. 103(a) as being unpatentable over Stokes (USPN 5,611,030). Applicants respectfully traverse this rejection.

Stokes provides no teaching that would have suggested constraining destination device-dependent coordinates produced by a multi-dimensional color transformation to prevent removal or introduction of selected colorants specified by source device-dependent coordinates, as required by claims 1-9, 11, 12, 20-28, 30, 38-46, 48, and 49.

In addition, Stokes fails to disclose or suggest constraining destination device-dependent coordinates produced by a multi-dimensional color transformation to prevent introduction of selected colorants not specified by source device-dependent coordinates, as set forth in claims 13-17, 19, 31-35, 37, 50-54 and 56.

Stokes also lacks any suggestion of a method for multi-dimensional color transformation comprising constraining destination device-dependent coordinates

to a range of matching destination coordinates searched by the multi-dimensional color transformation to prevent substitution for colorants specified by the source device-dependent coordinates, as required by claims 59-68.

The Examiner has misinterpreted Stokes relative to the requirements of Applicants' claims. Applicants maintain that the rejection is improper for all of the reasons previously stated in the Response filed July 22, 2005. For conciseness, however, the following remarks will focus on the new remarks made by the Examiner in the Response to Arguments section of the Final Office Action.

In the Response to Arguments section, the Examiner stated that, in Stokes, "the selected colorant specified by the source-device coordinates is the source device coordinates of color names which are detected as out-of-gamut color name coordinates due to color name boundary violations." In Stokes, an out-of-gamut color A having a first color name is initially mapped to an in-gamut color A' having a different color name. According to the Examiner, "color name A of the source device specified by the source device-dependent coordinates is removed or selected name A' not specified by the source device-dependent coordinates are introduced since color name A of the source device is different from color name A' of the destination device."

The Examiner characterized the detection of a color name violation, in Stokes, as a constraint "to prevent the removal of selected out-of-gamut color name A specified by source device-dependent coordinates or the introduction of selected color name A' not specified by the source device-dependent coordinates." On this basis, the Examiner stated that "the destination device-dependent coordinates are constrained so that there is no removal of the color name A (specified by the source device-dependent coordinates) or there is no introduction of color name A' (not specified by the source device-dependent coordinates)" (emphasis added).

The Examiner's remarks appear to equate a color name with a device colorant. This is incorrect. Source device coordinates do not specify a color name. Instead, they specify a set of colorants to be applied in combination to form a color. As previously explained by Applicants, in Stokes, a color name is merely a perceptual label that is assigned to a color produced by a combination of colorants. In Stokes, there is no constraint on the particular device colorants used

to form the color. Rather, different combinations of device colorants may form a color in Stokes, provided that the color name assigned to the color is correct.

Hence, Stokes has no regard for particular set of colorants specified by a set of source device-dependent coordinates. Instead, Stokes is concerned with the ultimate visual appearance of a color, as judged by its perceptual color name.

As an illustration, assume that a set of source-device dependent coordinates specify a particular set of CMYK colorants, and that the set of CMYK colorants produces a color that corresponds to the perceptual label “orange.” When mapping from an out-of-gamut orange color to an in-gamut color, Stokes ensures that the in-gamut color falls within the range of colors that correspond to the perceptual label “orange.” Yet, this has nothing to do with the particular device colorants that are used to produce the orange color.

Contrary to the requirements of Applicants’ claims, there is no mention in Stokes of the prevention of, removal of, or substitution for selected colorants specified by source device-dependent coordinates, nor introduction of selected colorants not specified by source device-dependent coordinates. Again, Stokes has no regard for the individual colorants that are applied to form a color. Moreover, Stokes has no regard for the source device-dependent coordinates that specify such colorants. Rather, Stokes implies that any set of the colorants are acceptable if they produce a color within an acceptable color name category, without any consideration of how the destination device colorants relate to colorants specified by the source device-dependent coordinates.

With respect to the difference between a colorant and a color name, the Examiner apparently concluded that there is no difference. The Examiner noted that Stokes describes converting from a CRT color space to a printer color space, e.g., RGB to CMYK. The Examiner then pointed to the RGB cube illustrated in FIG. 1 of Stokes, and noted that the “cube represents all colors available to the source device (red, blue and green) and the dots represent the available colors of the destination device (cyan, magenta, yellow and black) and that the color names are defined in the cube.”

However, the color names defined in the cube do not relate to constraints placed upon device colorants. Indeed, an RGB display device and a CMYK printer do not even have a common device-dependent coordinate system, as required by Applicant’s claims. The CMYK printer cannot introduce or prevent

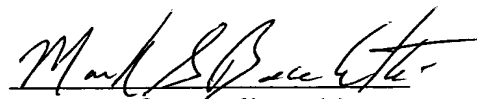
removal of RGB colorants, because it does not use RGB colorants. This discrepancy further underscores the differences between the claimed invention and the Stokes reference.

The Examiner further noted that, for building the lookup table in Stokes, "the destination color is considered to be an exact match of the source color." Again, this statement relates to color and not the colorants used to produce the color. When the Stokes system verifies color names, it seeks to ensure that a perceptually similar color is produced. There is no basis to conclude that the Stokes system also verifies that the destination device prevents removal or introduction of selected device colorants specified by source device-dependent coordinates.

In summary, for the reasons stated in this response and the previous response, the Examiner has not established a prima facie case of unpatentability with respect to Applicant's claims. Therefore, the rejection under section 103 should be withdrawn.

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 05-0225. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.